



ENERGY STAR® Application for Certification

87

ENERGY STAR®
Score¹

CBRE - 101 Arch St

Registry Name: CBRE - 101 Arch St
Property Type: Office
Gross Floor Area (ft²): 473,896
Built: 1988

For Year Ending: 11/30/2016²
Date Application Becomes Ineligible: 03/30/2017

¹ The ENERGY STAR Score is based on total source energy. A score of 75 is the minimum to be eligible for the ENERGY STAR.

² Applications must be submitted to EPA within 120 days of the Year Ending Date. The award is not final until approval is received from EPA.



Please use the [Licensed Professional's Guide to the ENERGY STAR® for Commercial Buildings](http://www.energystar.gov/lpguide) for reference in completing this checklist (<http://www.energystar.gov/lpguide>).

Property & Contact Information

Property Address

CBRE - 101 Arch St
 101 Arch Street
 Boston, Massachusetts 02110

Property Owner

CLPF 101 Arch LLP
 101 Arch Street 17th Floor
 Boston, MA 02110
 () -

Primary Contact

Laura Mintz
 CBRE NE Partners, LP as Manager
 101 Arch Street, Suite 230
 Boston, MA 02110
 617-204-1030
laura.mintz@cbre-ne.com

Property ID: 1370872

Clarion ID: 300154

Boston Energy Reporting ID:
 0304597000

1. Review of Whole Property Characteristics

Basic Property Information

1) Property Name for Registry: CBRE - 101 Arch St

Is this the official name to be displayed in the [Registry of ENERGY STAR Certified Buildings and Plants](#)?

☒ Yes ☐ No

If "No", please specify: _____

2) Property Type: Office

☒ Yes ☐ No

Is this an accurate description of the primary use of this property?

3) Location:

101 Arch Street
Boston, Massachusetts 02110

☒ Yes ☐ No

Is this correct and complete?

4) Gross Floor Area: 473,896 ft²

Does this represent the entire property? (i.e., no part of the building/property was excluded/subtracted from the total) If "no" please specify what space has been excluded.

☒ Yes ☐ No

5) Average Occupancy: (b) (4)

Is this occupancy accurate for the entire 12 month period being assessed?

☒ Yes ☐ No

6) Number of Buildings: 1

Does this number accurately represent all structures?

☒ Yes ☐ No

Notes:

Indoor Environmental Standards

1) Ventilation for Acceptable Indoor Air Quality

Does this property meet the minimum ventilation rates according to ANSI/ASHRAE Standard 62.1, Ventilation for Acceptable Indoor Air Quality?

☒ Yes ☐ No

2) Acceptable Thermal Environmental Conditions

Does this property meet acceptable thermal environmental conditions according to ANSI/ASHRAE Standard 55, Thermal Environmental Conditions for Human Occupancy?

☒ Yes ☐ No

3) Adequate Illumination

Does this property meet the minimum illumination levels as recommended by the Illuminating Engineering Society of North America (IESNA) Lighting Handbook?

☒ Yes ☐ No

Notes:

2. Review of Property Use Details

Parking: Parking Garage

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) **Open Parking Lot Size:** 0 ft²

Is this the total area that is lit and used for parking vehicles? Open Parking Lot Size refers specifically to open area, which may include small shading covers but does not include any full structures with roofs. Parking lot size may include the area of parking spots, lanes, and driveways.

☒ Yes ☐ No

★ 2) **Partially Enclosed Parking Garage Size:** 0 ft²

Is this the total area of parking structures that are partially enclosed? This includes parking garages where each level is covered at the top, but the walls are partially or fully open.

☒ Yes ☐ No

★ 3) **Completely Enclosed Parking Garage Size:** 23,242 ft²

Is this the total area of parking structures that are completely enclosed on all four sides and have a roof? This includes underground parking or fully enclosed parking on the first few stories of a building.

☒ Yes ☐ No

★ 4) **Supplemental Heating:** 100% Yes

Is this the correct answer to whether your parking garage has Supplemental Heating, which is a heating system to pre-heat ventilation air and/or maintain a minimum temperature during winter months?

☒ Yes ☐ No

Notes:

Office: Building

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) **Gross Floor Area:** 406,631

Is this the total size, as measured between the outside surface of the exterior walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area

☒ Yes ☐ No

should not include any exterior spaces such as balconies or exterior loading docks and driveways.

★ 2) **Weekly Operating Hours:** (b) (4)

Is this the total number of hours per week that the property is occupied by the majority of the employees? It does not include hours when the HVAC system is starting up or shutting down, or when property is occupied only by maintenance, security, cleaning staff, or other support personnel. For properties with a schedule that varies during the year, use the schedule most often followed.

☒ Yes ☐ No

★ 3) **Number of Workers on Main Shift:** (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No

★ 4) **Number of Computers:** (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No

★ 5) **Percent That Can Be Heated:** (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No

★ 6) **Percent That Can Be Cooled:** (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

Notes:

Food Service: Restaurant

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) **Gross Floor Area:** 10,213

Is this the total size, as measured between the outside surface of the exterior walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an

☒ Yes ☐ No

atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

Notes:

Fast Food Restaurant: Small Restaurants

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) Gross Floor Area: 4,034

Is this the total size, as measured between the outside surface of the exterior walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

☒ Yes ☐ No

Notes:

Office: Concourse and Back of House

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) Gross Floor Area: 47,683

Is this the total size, as measured between the outside surface of the exterior walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an

☒ Yes ☐ No

atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

★ 2) Weekly Operating Hours: (b) (4)

Is this the total number of hours per week that the property is occupied by the majority of the employees? It does not include hours when the HVAC system is starting up or shutting down, or when property is occupied only by maintenance, security, cleaning staff, or other support personnel. For properties with a schedule that varies during the year, use the schedule most often followed.

☒ Yes ☐ No

★ 3) Number of Workers on Main Shift: (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No

★ 4) Number of Computers: (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No

★ 5) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No

★ 6) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

Notes:

The workers listed in this section include building engineers, maintenance personnel, & cleaners, all of whom are on the main day shift. These people do not have need for their own dedicated computers, thus the low ratio of computers to workers

Restaurant: (b) (4)

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) Gross Floor Area: 5,335

Is this the total size, as measured between the outside surface of the exterior walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross

☒ Yes ☐ No

Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

Notes:**3. Review of Energy Consumption****Data Overview****Site Energy Use Summary**

Natural Gas (kBtu) (b) (4)
 Electric - Grid (kBtu)
 Total Energy (kBtu) 32,119,381.5

Energy Intensity

Site (kBtu/ft²) 67.8
 Source (kBtu/ft²) 206.6

National Median Comparison

National Median Site EUI (kBtu/ft²) 114.5
 National Median Source EUI (kBtu/ft²) 348.9
 % Diff from National Median Source EUI -40.8%

Emissions (based on site energy use)

Greenhouse Gas Emissions (Metric Tons CO₂e) 2,698.9

Power Generation Plant or Distribution Utility:
 NSTAR Co [Eversource Energy]

Note: All values are annualized to a 12-month period. Source Energy includes energy used in generation and transmission to enable an equitable assessment.

Summary of All Associated Meters

The following meters are associated with the property, meaning that they are added together to get the total energy use for the property. Please see additional tables in this checklist for the exact meter consumption values.

Meter Name	Fuel Type	Start Date	End Date	Associated With
National Grid/ (b) (4)	Natural Gas	01/01/2006	In Use	CBRE - 101 Arch St
Restaurant Gas	Natural Gas	06/01/2009	In Use	CBRE - 101 Arch St
NSTAR/ (b) (4)	Electric	01/01/2006	In Use	CBRE - 101 Arch St

Total Energy Use

☒ Yes ☐ No

Do the meters shown above account for the total energy use of this property during the reporting period of this application?

Additional Fuels
☒ Yes ☐ No

Do the meters above include all fuel *types* at the property? That is, no additional fuels such as district steam, generator fuel oil have been excluded.

On-Site Solar and Wind Energy
☒ Yes ☐ No

Are all on-site solar and wind installations reported in this list (if present)? All on-site systems must be reported.

Notes:

Natural Gas Meter: National Grid/ (b) (4) (therms)

Associated With: CBRE - 101 Arch St

Start Date	End Date	Usage
11/04/2015	12/07/2015	(b) (4) ✓
12/07/2015	01/07/2016	✓
01/07/2016	02/05/2016	✓
02/05/2016	03/07/2016	✓
03/07/2016	04/07/2016	✓
04/07/2016	05/06/2016	✓
05/06/2016	06/07/2016	✓
06/07/2016	07/08/2016	✓
07/08/2016	08/08/2016	✓
08/08/2016	09/07/2016	✓
09/07/2016	10/06/2016	✓
10/06/2016	11/04/2016	✓
11/04/2016	12/07/2016	✓
Total Consumption (therms):		(b) (4)
Total Consumption (kBtu (thousand Btu)):		(b) (4)

Total Energy Consumption for this Meter

☒ Yes ☐ No

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

Natural Gas Meter: Restaurant Gas (therms)

Associated With: CBRE - 101 Arch St

Start Date	End Date	Usage
11/04/2015	12/04/2015	(b) (4) ✓
12/04/2015	01/06/2016	(b) (4) ✓
01/06/2016	02/04/2016	(b) (4) ✓
02/04/2016	03/04/2016	(b) (4) ✓
03/04/2016	04/05/2016	(b) (4) ✓
04/05/2016	05/06/2016	(b) (4) ✓
05/06/2016	06/04/2016	(b) (4) ✓
06/04/2016	07/07/2016	(b) (4) ✓
07/07/2016	08/05/2016	(b) (4) ✓
08/05/2016	09/02/2016	(b) (4) ✓
09/02/2016	10/05/2016	(b) (4) ✓
10/05/2016	11/03/2016	(b) (4) ✓
11/03/2016	12/06/2016	(b) (4) ✓
Total Consumption (therms):		(b) (4)
Total Consumption (kBtu (thousand Btu)):		(b) (4)

Total Energy Consumption for this Meter

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

☒ Yes ☐ No

Notes:

Electric Meter: NSTAR/ (b) (4) (kWh (thousand Watt-hours))

Associated With: CBRE - 101 Arch St

Start Date	End Date	Usage	Green Power?
10/29/2015	12/01/2015	(b) (4) ✓	No
12/01/2015	01/03/2016	✓	No
01/03/2016	02/01/2016	✓	No
02/01/2016	03/01/2016	✓	No
03/01/2016	03/30/2016	✓	No
03/30/2016	04/30/2016	✓	No
04/30/2016	05/31/2016	✓	No
05/31/2016	06/29/2016	✓	No
06/29/2016	07/31/2016	✓	No
07/31/2016	08/30/2016	✓	No
08/30/2016	09/29/2016	✓	No
09/29/2016	10/31/2016	✓	No
10/31/2016	11/30/2016	✓	No

Total Consumption (kWh (thousand Watt-hours)):

Total Consumption (kBtu (thousand Btu)):

(b) (4)

Total Energy Consumption for this Meter

☒ Yes
 ☐ No

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

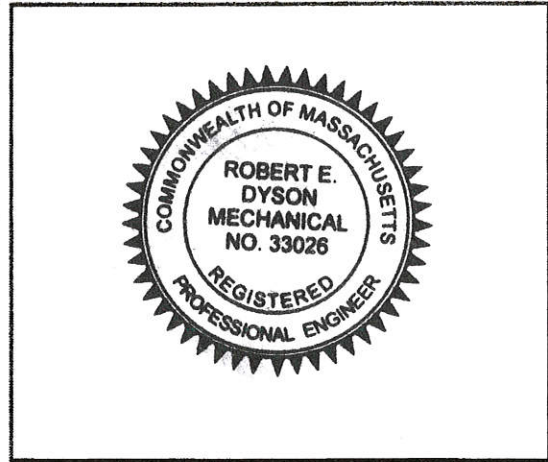
4. Signature & Stamp of Verifying Licensed Professional

Robert Dyson (Name) visited this site on 1/5/2017 (Date). Based on the conditions observed at the time of the visit to this property, I verify that the information contained within this application is accurate and in accordance with the Licensed Professional Guide.

Signature: [Signature]Date: 1/6/2017

Licensed Professional
License: 33026 in MA

Robert Dyson
313 Congress Street
Boston, MA 02210
617-330-9390
rdyson@c3boston.com



NOTE: When applying for the ENERGY STAR, the signature of the Verifying Professional must match the stamp.

Professional Engineer Stamp

5. Signatory Agreement

I hereby nominate the above described property for award of the ENERGY STAR. I have provided a copy of the Licensed Professionals Guide to the ENERGY STAR for Commercial Buildings to our Licensed Professional (LP) for reference. As documented by the above checklist, this property meets the conditions necessary to qualify as ENERGY STAR. I am submitting this application within four months of the Year Ending Date (November 30, 2016) used to generate the application. I will assist EPA, if requested, in verifying any data included in this application. Furthermore, I agree to associate the ENERGY STAR logo only with this property and to adhere to the ENERGY STAR Identity Guidelines.

Signature (must be a direct employee of the building owner/manager): [Signature]Date: 1/3/17

Signatory Name: Laura Mintz

Property Owner: CLPF 101 Arch LLP

This government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S. EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460